

**Speaker:** Ananth Shankar

**Title:** Geometric Manin-Mumford in positive characteristic

**Abstract:** The Manin-Mumford conjecture (now a theorem) posits that a subvariety of an abelian variety (or torus) in characteristic zero that contains a Zariski-dense set of torsion points must be the translate of an abelian sub-variety (or subtorus) by a torsion point. In positive characteristic, this conjecture is necessarily false as every point defined over a finite field is torsion. I will discuss a geometric version of this conjecture in positive characteristic, as well as other results having a transcendental flavour. This is based on work in progress with Anup Dixit, Philip Engel, and Ruofan Jiang.